**{In Archive} Albuquerque regional aquifer/Kirtland AFB fuel spill modeling**

Tara Hubner to: Scott Ellinger 09/22/2011 05:32 PM
Cc: Laurie King

From: Tara Hubner/R6/USEPA/US
To: Scott Ellinger/R6/USEPA/US@EPA
Cc: Laurie King/R6/USEPA/US@EPA
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Scott,

You may have heard about it already, but Kirtland AFB in Albuquerque had an aviation gas and jet fuel (JP-4 and JP-8) leak which has resulted in a substantial free-phase and dissolved phase plume. The EDB (from the av gas) extends the furthest of all the contaminants. The use of av gas was phased out in 1975, so the leak was quite old. The below grade line leakage along the offloading rack was discovered in 1999 during pressure testing of the fuel system. NMED has estimated that the spill was approximately 8 million gallons.

The City of Albuquerque has some water well fields less than a mile from the plume. The VA Hospital and KAFB have water wells near the plume.

I asked Laurie if it might be possible to perform some modeling of the aquifer and the plume to get an idea of how the water wells may be affecting the flow and estimate how long til it reaches the wells. I assume the Air Force's contractor is doing some modeling, but it may be good for us to model it also to help out the City.

Would you be interested in doing this modeling? Does it seem feasible? What sort of information would you need?

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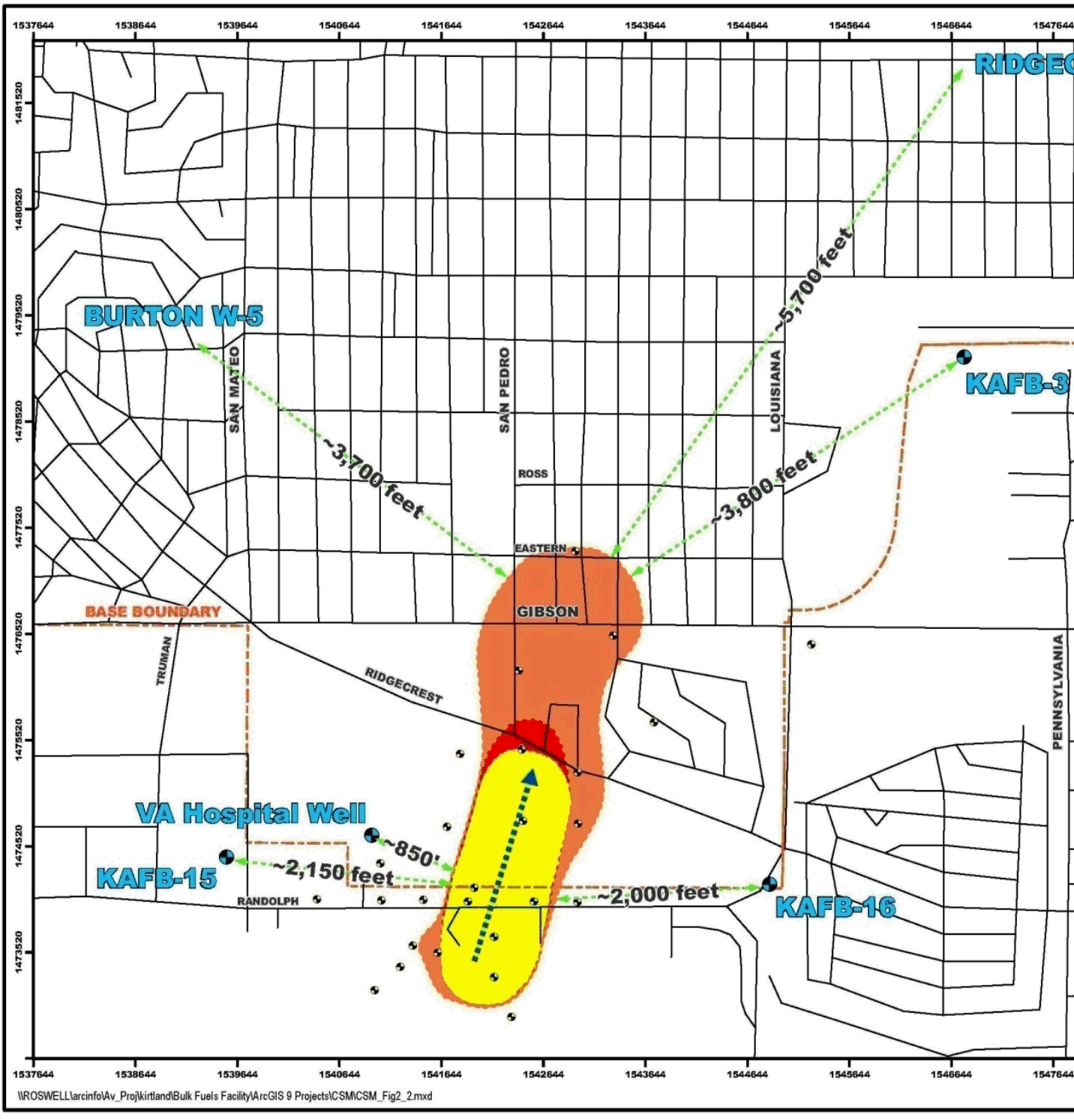
Here is a map of the plume relative to the water wells. It's over a year old. They have more wells now, but I couldn't find a similar map with recent data. Their maps seem to always define the plume boundaries according to detections above mcl, not just detections in general. So the area of affected groundwater is actually larger that the map shows.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SAN MATEO
SAN PEDRO
LOUISIANA
ROSS
EASTERN
GIBSON
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~5,700 feet
~3,800 feet
KAFB-3
BASE BOUNDARY
TRUMAN
RIDGECREST
PENNSYLVANIA
VA Hospital Well
~850'
KAFB-15
~2,150 feet
RANDOLPH
~2,000 feet
KAFB-16
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